

4. (ONCE AMENDED) A genetic motif extracting and processing apparatus according to claim 2, further comprising motif editing means for editing the motif extracted by the motif extracting means.

5. (ONCE AMENDED) A genetic motif extracting and processing apparatus according to claim 2, further comprising alignment means for alignment-processing a plurality of gene arrangement information input by the gene arrangement information inputting means.

A2
6. (ONCE AMENDED) A genetic motif extracting and processing apparatus according to claim 2, further comprising:
motif storing means for storing motifs; and
motif registering means for registering the motif extracted by the motif extracting means into said motif storing means.

A3
8. (ONCE AMENDED) A genetic motif extracting and processing method comprising:
inputting at least one piece of gene arrangement information;
designating interactively on a display screen a motif extraction range in the input gene arrangement information;
extracting a genetic motif within the designated motif extraction range from the input gene arrangement information;
retrieving, based on the motif extracted from the input gene arrangement information, gene arrangement information including the extracted motif, from a gene arrangement information database; and
adding the retrieved extracted-motif-based gene arrangement information to the input gene arrangement information.

9. (ONCE AMENDED) A recording medium recorded with a genetic motif extracting and processing program realizing a process of:
inputting at least one piece of gene arrangement information;
designating interactively on a display screen a motif extraction range in the input gene arrangement information;
extracting a genetic motif within the designated motif extraction range from the input gene arrangement information;

retrieving, based on the motif extracted from the input gene arrangement information, gene arrangement information including the extracted motif, from a gene arrangement information database; and

adding the retrieved extracted-motif-based gene arrangement information to the input gene arrangement information.

REMARKS

The Abstract is objected for including a grammatically incorrect first sentence.

STATUS OF CLAIMS

Claims 1-9 are pending.

Claims 1-7 are rejected under 35 USC 112, second paragraph, for indefiniteness.

Claims 1, 3 and 5-9 are rejected under 35 USC 102(b) as being anticipated by Attwood (J. Chem. Inf. Comput. Sci. 1997) Vol. 37, pp. 417-424.

Claims 1-9 are rejected under 35 USC 103(a) as being unpatentable over Kawanishi (US Patent No. 5,598,350) and Attwood.

Claim 1 is canceled without prejudice or disclaimer, and claims 2-6 and 8-9 are amended.

Thus, claims 2-9 remain pending for reconsideration, which is respectfully requested.

The foregoing rejections are traversed. No new matter has been added in this Amendment.

ABSTRACT

The Examiner objected to the Abstract for including a grammatically incorrect first sentence. The Abstract is amended taking into consideration the Examiner's comment. Withdrawal of the objection is respectfully requested.

35 USC 112, SECOND PARAGRAPH, REJECTIONS OF CLAIMS 1-7

The Examiner asserts that the term "clarified" recited in claim 1 is inappropriate in the context of gene arrangement information and that the term may have been translated incorrectly. Taking the Examiner's comments into consideration, the Applicants assert that the Japanese term corresponding to the term "clarified" could be translated into "sequenced" or "identified" in the context of the genetic field. Accordingly, the recitation "clarified gene arrangement